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English ..... En

Français ..... Fr

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En

User's Guide

MegaWorks THX 6.1 650D

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December 2002

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Safety Warnings

The lightning flash arrowhead within an equilateral triangle is intended to alert the user to the presence of uninsulated, "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

WARNING

DO NOT OPEN

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SPEAKER COVERS (OR BACKS). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

AVISQUE

POUR EVITER TOUT RISQUE DE CHOC ELECTRIQUE, NE PAS DEMONTER LE COUVERCLE DU HAUT PARLEUR. AUCUN ENTRETIEN DES PIECES INTERIEURES N EST REQUIS. TOUT SERVICE D ENTRETIEN NE DOIT ETRE EFFECTUE QUE PAR DU PERSONNEL D ENTRETIEN QUALIFIE.

READ AND HEED IMPORTANT SAFETY WARNING ON REAR OF SPEAKER ENCLOSURE

CAUTION:

TO PREVENT THE RISK OF ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT CAREFULLY.

ATTENTION:

POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.

IMPORTANT NOTICE:

THE SERIAL NUMBER FOR THE SPEAKER IS LOCATED ON THE SUBWOOFER. PLEASE WRITE THIS NUMBER DOWN AND KEEP IT IN A SECURE AREA. THIS IS FOR YOUR SECURITY.

CAUTION:

This symbol indicates that the marked item may be Hot and should not be touched without proper care.

- To minimise the risk of burns and other injuries to children, position the device such that hot surfaces are out of their reach.
- To minimise the risk of fire, keep flammable materials like paper and cloth (for example, curtains) away from the hot surface.

WARNING:

Do not expose this apparatus to dripping or splashing fluids, and ensure that no objects filled with liquids — such as vases — are placed on the apparatus.

Safety & Regulatory Information

The following sections contain notices for various countries:

Notice for the USA

FCC Part 15: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, this notice is not a guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try one or more of the following measures:

- ❒ Reorient or relocate the receiving antenna.
- ❒ Increase the distance between the equipment and receiver.
- ❒ Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- ❒ Consult the dealer or an experienced radio/ TV technician.

CAUTION: To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed with computer equipment certified to comply with the Class B limits.

All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

Modifications
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Notice for Canada

This apparatus complies with the Class B limits for radio interference as specified in the Canadian Department of Communications Radio Interference Regulations.

Cet appareil est conforme aux normes de CLASSE "B" d'interference radio tel que spe'cifie' par le Ministère Canadien des Communications dans les règlements d'interfèrence radio.

Important Notice

The serial number for the MegaWorks THX 6.1 650D is located on the subwoofer. Please write this number down and keep it in a secure area. This is for your security.

CAUTION

Take care to prevent accidental operation of your new loudspeaker system at excessive sound pressure levels!

In a typical personal computer installation, the MegaWorks THX 6.1 650D satellite speakers are less than a meter from the listener.

If you do not hear sound from your new speaker, keep the MegaWorks THX 6.1 650D's volume control at a low level (two Level Indicators lit on the wired remote control) while trying to restore sound to your system. This will prevent accidental operation at uncomfortably loud levels.

Compliance

This product conforms to the following Council Directive:
Directive 89/ 336/ EEC, 92/ 31/ EEC (EMC), 73/ 23/ EEC (LVD)

Declaration of Conformity

According to the FCC96 208 and ET95-19,
Manufacturer/Importer's Name: Creative Labs, Inc.
Manufacturer/Importer's Address: 1901 McCarthy Boulevard
Milpitas, CA. 95035
United States
Tel: (408) 428-6600
declares under its sole responsibility that the product

Trade Name: Creative Labs

Model Numbers: MMS6655

has been tested according to the FCC / CISPR22/85 requirement for Class B devices and found compliant with the following standards:

EMI/EMC: ANSI C63.4 1992, FCC Part 15 Subpart B
Complies with Canadian ICES-003 Class B.

This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesirable operation.

Ce matériel est conforme à la section 15 des régles FCC. Son Fonctionnement est soumis aux deux conditions suivantes:
1. Le matériel ne peut étre source D'interférences et
2. Doit accepter toutes les interférences reques, Y compris celles pouvant provoquer un fonctionnement indésirable.

Compliance Manager
Creative Labs, Inc.
September 11, 2002

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IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS - All safety and operating instructions should be read before the *MegaWorks THX 6.1 650D* amplified subwoofer/satellite system is operated.

RETAIN INSTRUCTIONS - The safety and operating instructions should be retained for future reference.

HEED WARNINGS - All warnings on the subwoofer and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS - All operating and usage instructions should be followed.

CLEANING - Unplug the subwoofer from the wall outlet or other power source before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

ATTACHMENTS - Do not use attachments not recommended by Cambridge SoundWorks and Creative Technology as they may cause hazards.

WATER AND MOISTURE - Do not use the subwoofer near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES - Do not place the *MegaWorks THX 6.1 650D* system on an unstable cart, stand, tripod, bracket, or table. The subwoofer or satellites may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by Cambridge SoundWorks and Creative Technology, or sold with the product. Any mounting of the satellites or subwoofer should follow the manufacturer's instructions, and should use a mounting accessory recommended by Cambridge SoundWorks and Creative Technology.

VENTILATION - Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the subwoofer and to prevent it from overheating; and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. The subwoofer should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or Cambridge SoundWorks' and Creative Technology's instructions have been adhered to.

HEAT - The subwoofer should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

POWER SOURCES - The subwoofer should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.

POLARISATION - The subwoofer may be equipped with a polarised alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarised plug.

POWER-CORD PROTECTION - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the subwoofer.

LIGHTNING - For added protection for the *MegaWorks THX 6.1 650D* system during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the subwoofer due to lightning and power-line surges.

OVERLOADING - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY - Never push objects of any kind into the subwoofer through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the subwoofer.

SERVICING - Do not attempt to service the subwoofer yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE - Unplug the subwoofer from the wall outlet or other power source and refer servicing to qualified service personnel under the following conditions:

a) When the power-supply cord or plug is damaged.

b) If liquid has been spilled, or object have fallen into the subwoofer.

c) If the subwoofer has been exposed to rain or water.

d) If the subwoofer does not operate normally by following the operating instructions; or exhibits a distinct change in performance.

e) If the product has been dropped or damaged in any way.

REPLACEMENT PARTS - When replacement parts are required, be sure the service technician has used replacement parts specified by Cambridge SoundWorks and Creative Technology, or have the same characteristics as the original part. Unauthorised substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK - Upon completion of any service or repairs to the *MegaWorks THX 6.1 650D* system, ask the service technician to perform safety checks to determine that the *MegaWorks THX 6.1 650D* system is in proper operating condition.

WALL OR CEILING MOUNTING - The *MegaWorks THX 6.1 650D* satellites should be mounted to a wall or ceiling only as recommended by Cambridge SoundWorks and Creative Technology.

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Introduction

Thank you for purchasing MegaWorks THX 6.1 650D by Cambridge SoundWorks®.

This high-quality 6.1 amplified multimedia speaker system features the finest drivers, precision internal crossover and amplifier circuitry in an elegant enclosure design.

MegaWorks THX 6.1 650D supports the very latest in audio technology today. This includes: EAX™, DirectSound®3D, and multichannel gaming. The powerful speakers also support 5.1 or 6.1 analog output, or 5.1 digital output from the the latest Sound Blaster® Live!™ and Audigy™ series audio cards. To experience MegaWorks THX 6.1 650D's full potential, we recommend that you take a few minutes to read through this User's Guide.

For instructions on how to set up your speakers, refer to the Quick Start Guide provided in the MegaWorks THX 6.1 650D package. Remember to ensure that all plugs are securely fastened to their respective sockets before operating your speaker system.

EAX™

With its six compact satellite speakers and a separate subwoofer with 7-channel amplification, the Cambridge SoundWorks MegaWorks THX 6.1 650D is an incredible 6.1 speaker system for use with Creative's EAX-enabled products. The MegaWorks THX 6.1 650D has built-in 24-bit Digital-to-Analogue Converters (DACs) and with its high power output, delivers a thrilling, high quality PC home theatre audio experience that meets the prestigious THX multimedia certification standard. Combine this speaker system with the all new Sound Blaster Audigy 2 series audio cards and you'll experience the ultimate in high-powered, high definition playback of your Dolby Digital Surround EX titles on your PC. For more information on EAX, be sure to visit EAX.creative.com.

THX Certification

LUCASFILM THX®

Certified products must meet an exclusive set of performance standards established by THX. These THX performance standards were originally developed in response to George Lucas' personal desire to insure that the original Star Wars™ soundtracks, heard in the cinema, matched those created on the sound stage. Later, these standards were extended to encompass Home Theater systems and recently adapted to the specialised needs of multichannel surround reproduction from movies and games, on DVD, played back on a PC-based multimedia system. All multimedia products seeking THX Certification must meet these rigorous performance requirements and quality standards before they can carry the THX logo which is your guarantee that this THX certified Multimedia product will give you performance and reliability, second-to-none, for years to come. These performance standards cover all aspects of the product including power handling, frequency response, dispersion characteristics, etc.

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Using the Wired Remote Control

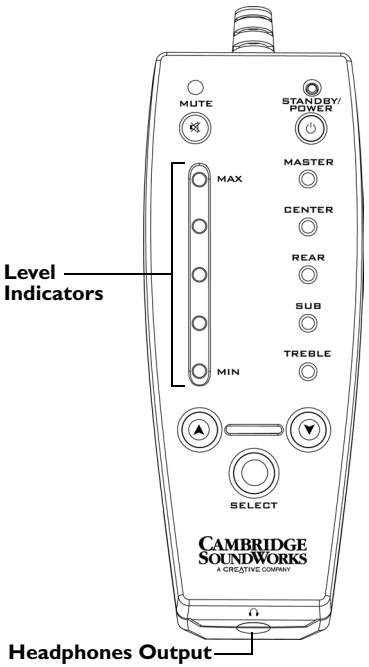


Figure 1: Remote Control

Turning the speaker system On/Off

- Ensure that the subwoofer's main power switch is turned on.
- To turn on the speaker system or switch to power-on mode, press the **STANDBY/ POWER** button once. The red indicator above the button shuts off, and the **MASTER** volume mode indicator lights up.
- To turn off the speaker system or switch to standby mode, press the **STANDBY/ POWER** button again. The red indicator above the button lights up.

Notes

- On first power-on, the speaker system uses default volume, subwoofer and treble settings.
- On the subsequent power-on, the system reinstates the last-used volume, subwoofer and treble settings.
- Volume, subwoofer and treble settings will revert to the default if you turn off the main power switch, disconnect the AC power cord or remote control, or if there is a power interruption.

Adjusting Front/Center/Rear volume

- To adjust the volume of all speakers, press the **SELECT** button until the **MASTER** volume mode indicator is lit.
- To adjust the volume of the center speaker, press the **SELECT** button until the **CENTER** mode indicator is lit.
- To adjust the volume of the rear speakers and rear center speaker, press the **SELECT** button until the **REAR** mode indicator is lit.
- Press ▲ or ▼ to adjust the respective volume levels. Holding down either button will increase or reduce the volume levels continuously.

Notes

- The lowest two **Level Indicators** are lit in the default volume settings.
- The remote control will revert to **MASTER** volume mode if left idle for some time.
- For your own safety, reduce the volume level in **MASTER** volume mode before switching the system to standby mode.

Adjusting subwoofer or treble levels

- To adjust subwoofer levels, press the **SELECT** button until the **SUB** mode indicator is lit.
- To adjust treble levels, press the **SELECT** button until the **TREBLE** mode indicator is lit.
- Press ▲ or ▼ to adjust the respective levels. Holding down either button will increase or reduce the levels continuously.

General Notes

- In the default subwoofer and treble settings (flat response), the lowest three **Level Indicators** are lit.
- Pressing ▲ boosts the levels, and causes more **Level Indicators** to be lit. Pressing ▼ reduces the levels, and causes fewer **Level Indicators** to be lit.

Using headphones

- For private listening, you can connect headphones to the **Headphones Output** of the remote control.
  This will mute all speakers.
- Select **MASTER** volume mode to adjust the volume of your headphones.
- Select **TREBLE** mode to adjust the treble levels of your headphones.
- Select **SUB** mode to adjust the bass levels of your headphones.

Notes

- When you disconnect your headphones from the **Headphones Output**, the speaker system will revert to the default **MASTER** volume setting (two **Level Indicators** lit), so as to prevent high headphones volume levels from being applied to the speaker system.
- **REAR** mode and **CENTER** mode are disabled when you are using headphones.

Muting the volume

- To temporarily mute speakers or headphones, press the **MUTE** button once.
  All lit **Level Indicators** will blink during mute mode.
- To return to normal listening, press the **MUTE** button again.
  Alternatively, you can disable mute mode by pressing either ▲ or ▼.

Understanding Input Connectors

MegaWorks THX 6.1 650D provides three sets of input connectors:

- 6.1 Analog inputs for up to 6.1 channels
- Auxiliary Analog Stereo input for up to 2 channels
- Digital input for up to 5.1 channels from multichannel audio cards with digital output.

See “Connecting Input Devices” on page 4 for details of cable requirements. Basic cables for all the inputs are supplied.

Note: In certain situations, you may require additional cables that are not provided.

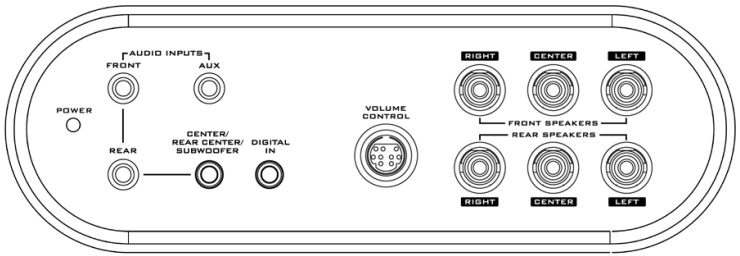


Figure 2: Input connectors on the rear panel

Connecting Input Devices

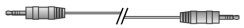
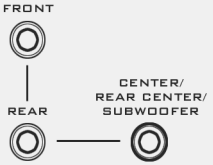
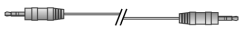
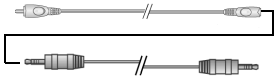
Devices	Cables	Subwoofer Input	Signal	Speaker Output
Sound Blaster Audigy 2	from device to subwoofer  4-pole miniplug (3.5mm) cable		PCM (multichannel)	Up to 5.1 channels depending on source
Sound Blaster Audigy 2	from device to subwoofer 6.1 Audio Cable		Analog (multichannel)	Up to 6.1 channels depending on source
2 channel audio card, MP3 player or other device with 3.5mm stereo miniplug socket	from device to subwoofer  Stereo 3.5mm miniplug cable (optional)		Analog (stereo)	2.1 channels
Set-top CD or DVD player or other stereo device via a coaxial output	from device to subwoofer  RCA-to-3.5mm mini-socket converter cable (optional) and 4-pole miniplug (3.5mm) cable		PCM (stereo)	2.1 channels

Table 1: Connecting analog and digital devices

Using Multiple Inputs

The MegaWorks THX 6.1 650D allows you to mix a second audio program source with the main program source (Analog Input 1 or Digital Input).

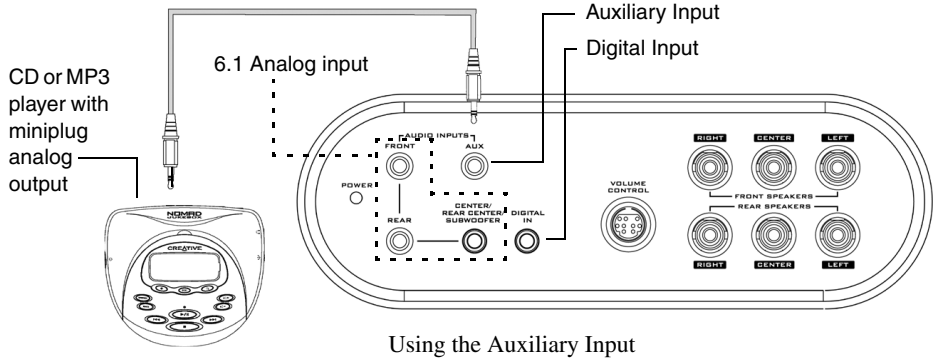
About the built-in Digital-to-Analog Converters

MegaWorks THX 6.1 650D features high performance true 24-bit Digital-to-Analog Converters supporting 44.1 kHz to 96 kHz sampling rates. Using the 3.5 mm 4-pole mini-socket digital input connection, owners of Sound Blaster Live! and Audigy series audio cards can enjoy the sonic realism of movies featuring up to 5.1 channels of digital soundtracks. (6.1 channel support via analog inputs only.)

Table 2 lists the results of using the multiple inputs in different ways on this system.

Table 2: Mixing audio through Digital and Analog inputs

Digital Input	6.1 Analog Input	Auxiliary Input	Result
Connected	Connected	Not connected	Digital only
Not connected	Connected	Connected	6.1 Analog Input and Auxiliary Input mixed
Connected	Connected	Connected	Digital Input and Auxiliary Input mixed
Connected	Not connected	Connected	Digital Input and Auxiliary Input mixed



Using the Auxiliary Input

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Controlling Noise and Distortion

MegaWorks THX 6.1 650D has moderately high input sensitivity, so it may amplify the hum and hiss inherent in some audio program sources. Any noise is not due to a fault in the speaker system.

You can minimise background noise as follows:

- Use the MegaWorks THX 6.1 650D remote control as your master volume control.
- If your speaker system is connected to a computer, adjust the settings of your computer's sound control software. (If you are using Creative Sound Blaster software, this would be the Surround Mixer application). Turn off any input controls that you do not need, such as Microphone, and set the remaining input controls to about 70% of their maximum volume.
- Adjust the master output volume of your sound control software, such that your speaker system reaches a comfortably loud volume in its default volume settings.

Specifications

General Specifications

Satellite Power
70Watts RMS per channel (6 channels)

Subwoofer Power
150Watts RMS

Frequency Response
25 Hz ~ 20 kHz
Signal-to-Noise Ratio (SNR):
99 dB

Input Voltage
For Europe/Asia:
230Vac 50/60 Hz 2.5A

For USA:
120Vac 60 Hz 5A

Magnetic Shielding
All satellite speakers are shielded to allow placement close to display devices that are sensitive to magnetic fields.